



Verizon Communications
1300 I Street NW, Suite 400W
Washington, DC 20005

January 4, 2002

Ex Parte

Ms. Magalie Roman Salas
Secretary
Federal Communications Commission
445 12th St., S.W. – Portals
Washington, DC 20554

RE: Application by Verizon-New England Inc. for Authorization To Provide In-Region, InterLATA Services in State of Rhode Island, Docket No. 01-324; Application by Verizon-New Jersey Inc. for Authorization To Provide In-Region, InterLATA Services in State of New Jersey, Docket No. 01-347

Dear Ms. Salas:

At the request of the Common Carrier Bureau, Verizon conducted an overview of our Wholesale and OSS services yesterday in Newark, NJ. The meeting attendees were: C. Odom, L. Owsley, K. McLean, S. Sullivan, T. Tibbs, M. Davis, D. Laventi, D. Bone, R. Ellis, G. Magliano and J. White of Verizon and A. Johns, J. Veach, E. Yockus, J. Miller, J. Reel and C. Newcomb of the FCC. The materials used during the session are enclosed. Please let me know if you have any questions. The twenty-page limit does not apply as set forth in DA 01-2746 and DA 01-2994.

Sincerely,

A handwritten signature in cursive script that reads "Clint E. Odom" followed by a circled monogram "AB".

Clint E. Odom

Attachments

cc: J. Veach
J. Stanley
G. Remondino
S. Pie
E. Yockus
J. Miller
J. Reel
C. Newcomb
A. Johns

**VERIZON FCC NJ OSS TOUR & TUTORIAL
JANUARY 3, 2002**

FCC Attendees: Alex Johns (NJ Team Leader), Jeremy Miller and Jon Reel
Julie Veach (RI Team Leader), Elizabeth Yockus and Christine Newcomb

TIMES	AGENDA ITEM OR EVENT	VERIZON REPRESENTATIVE
10:45 AM	Arrival of FCC Staff at Newark Train Station <i>Ground Transportation from Train Station at 1 Raymond Plz West to 540 Broad Street, floor 1, Callahan Center</i>	Clint Odom
11:00 AM	Check in FCC Visitors <i>Prepare FCC visitor badges in advance. Escort visitors to conference room. Continental breakfast will be available.</i>	Sean Sullivan Garret Magliaro Clint Odom
11:15 AM	Welcome to NMC	Sean Sullivan
11:20 AM	Welcome to Verizon New Jersey	Dennis Bone Clint Odom
11:30 AM	Overview of Agenda and Introductions	Clint Odom
	Working Lunch & Grab Sandwiches.	
11:45 AM 12:45 PM	Loops <ul style="list-style-type: none"> • Provisioning • Maintenance & Repair • DSL, Line Sharing, Line Splitting Operating Support Systems <ul style="list-style-type: none"> • Functionality & OSS Interfaces <ul style="list-style-type: none"> • Pre-ordering • Ordering • Provisioning • Billing • Maintenance & Repair • Development Approach & Change Management Change Requests <ul style="list-style-type: none"> • Documentation • Testing • Help Desk • KPMG Testing • Production Experience • 	C.B. Nogay Maureen Davis or Danny Lorenti John White Kathleen McLean
1:45 PM	Break	
2:00 PM	WEB GUI Demonstration – UNE and Resale Transactions <i>After demonstration, leave conference room and walk over to NMC (1 Washington)</i>	Kathleen McLean
3:00 PM	Tour of the NMC (1 Washington Square) <i>Walk floor and introduce customer service reps in action. Verizon CLEC/UNE and resale center and parallel observation with Verizon CLEC service reps.</i>	Garret Magliaro
4:00 PM	Wrap-up and Q&A	
4:30 PM	Depart for Train Station	

Wholesale Local Service Overview



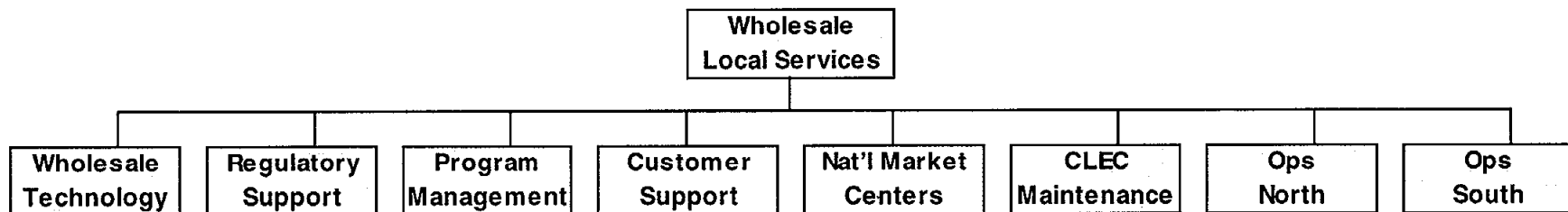
Agenda

- ♦ **Local Service Organization**
- ♦ **Wholesale Local Products and Services**
- ♦ **Service Order / Provisioning Process**
 - New Loop
 - Hot Cut
- ♦ **Maintenance Process**
- ♦ **Line Splitting / Sharing**

Wholesale Service

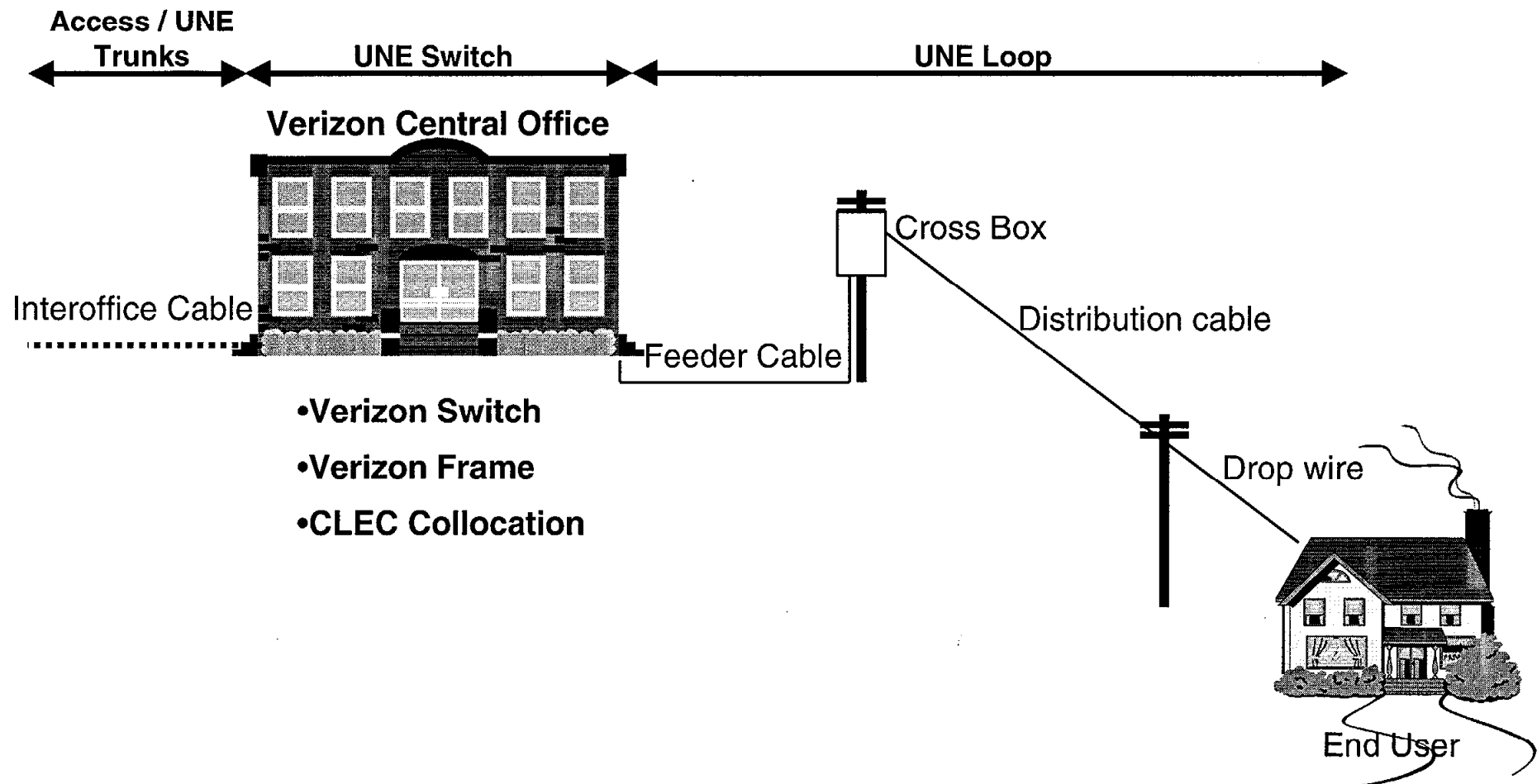
Local Services Organization

The Local Services group is structured in a geographic / functional fashion. Provisioning activities are divided geographically along the lines of the original Bell Atlantic, Nynex, and GTE territories.



Wholesale Service

Unbundling the Verizon Network



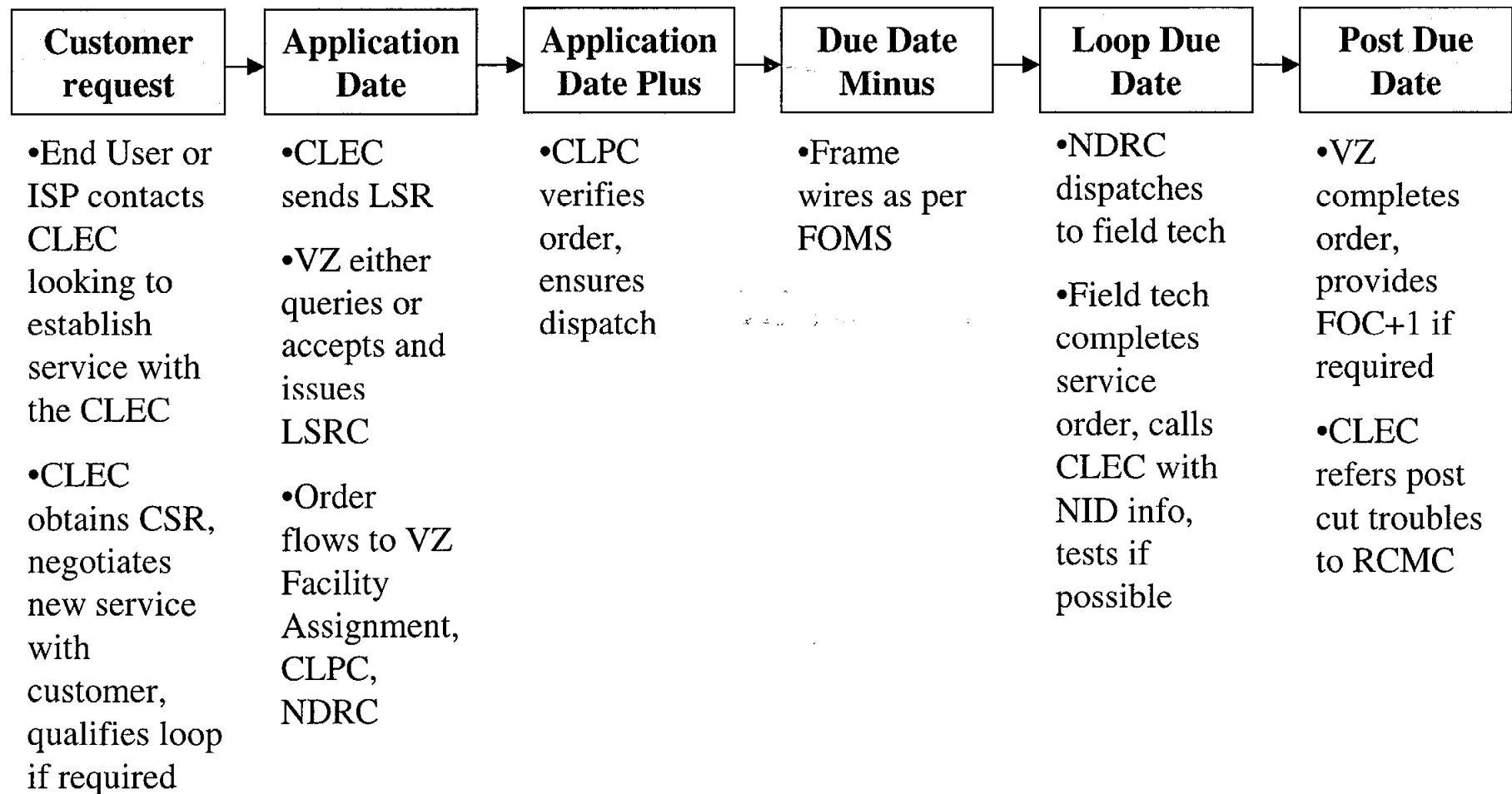
Wholesale Offerings

- ♦ **Array of products for different services**
 - Analog (POTS)
 - Digital (DSL, ISDN)
 - High Capacity
- ♦ **Though products very similar, the CLECs order under various “Modes of Entry”**
 - Resale
 - UNE
 - DSL (Stand Alone, Line Sharing, Line Splitting)

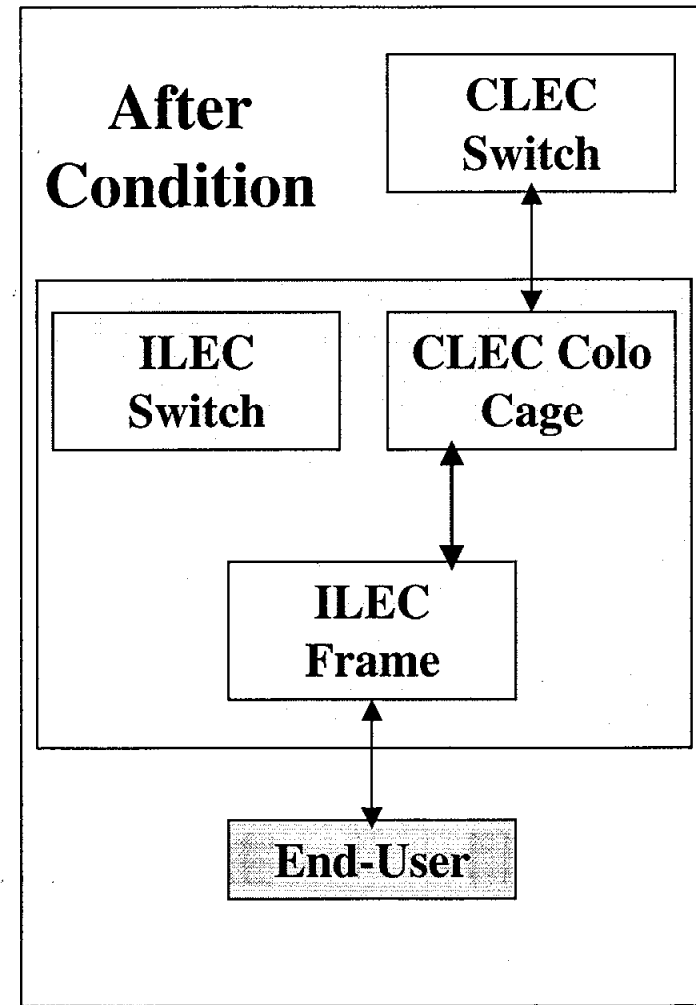
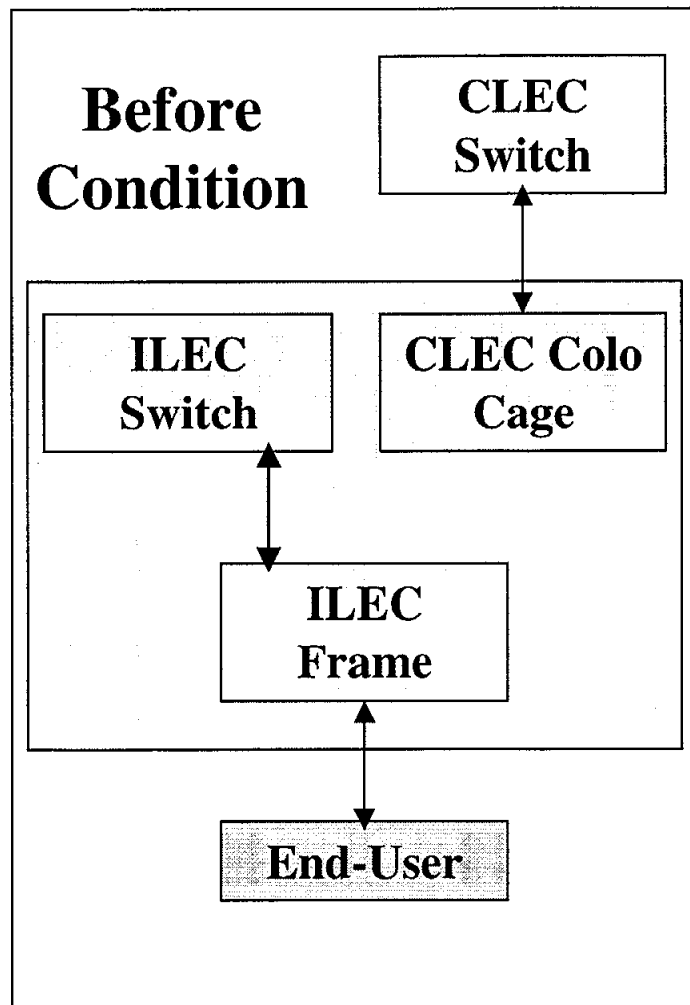
Wholesale Offerings

- ♦ **Loops provisioned in several ways**
 - Reuse of existing loop
 - Hot Cuts (VZ to CLEC, CLEC to CLEC)
 - Line Sharing
 - CLECs order new loop
- ♦ **The CLEC determines how the service will be ordered**

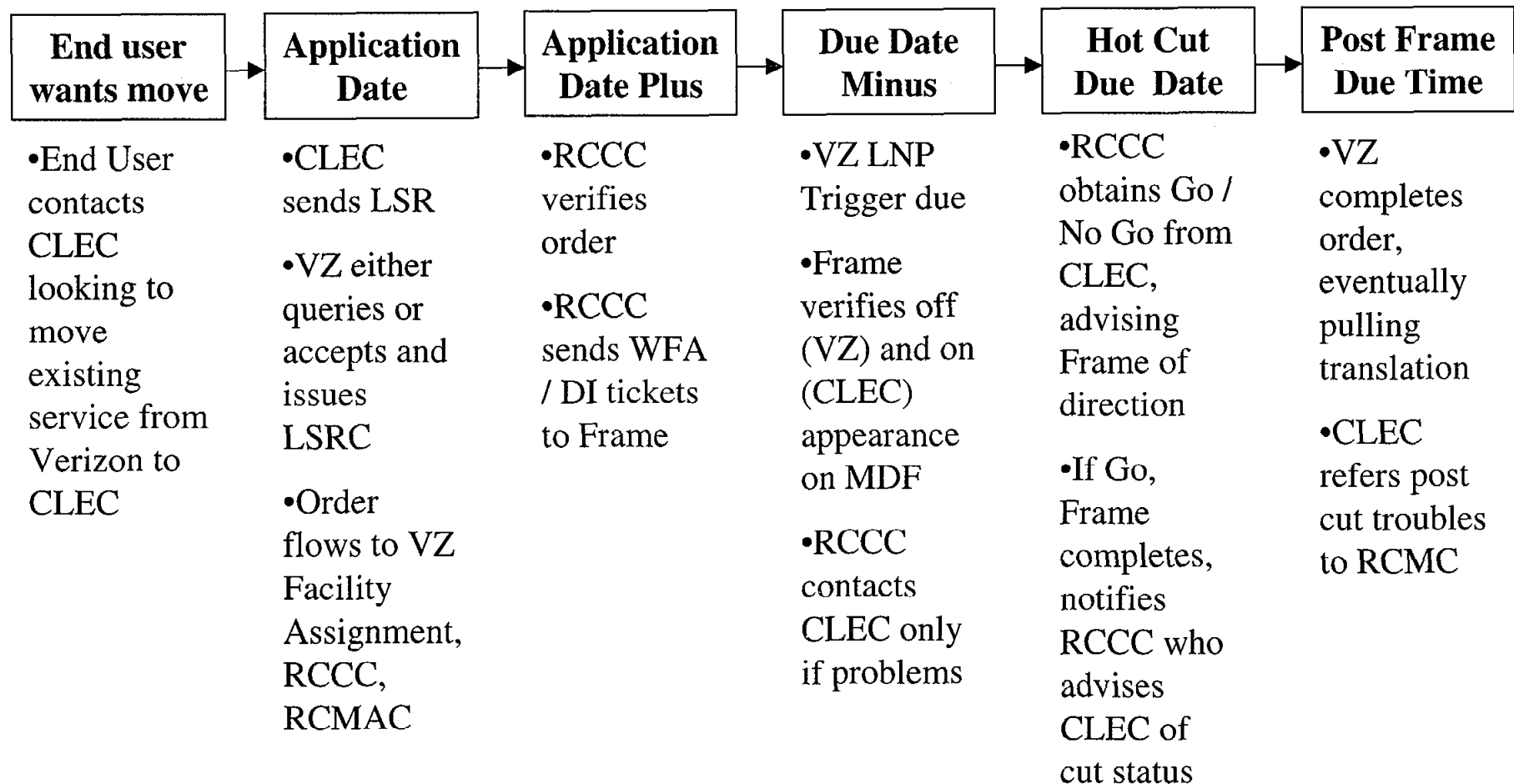
Simple New Loop Process



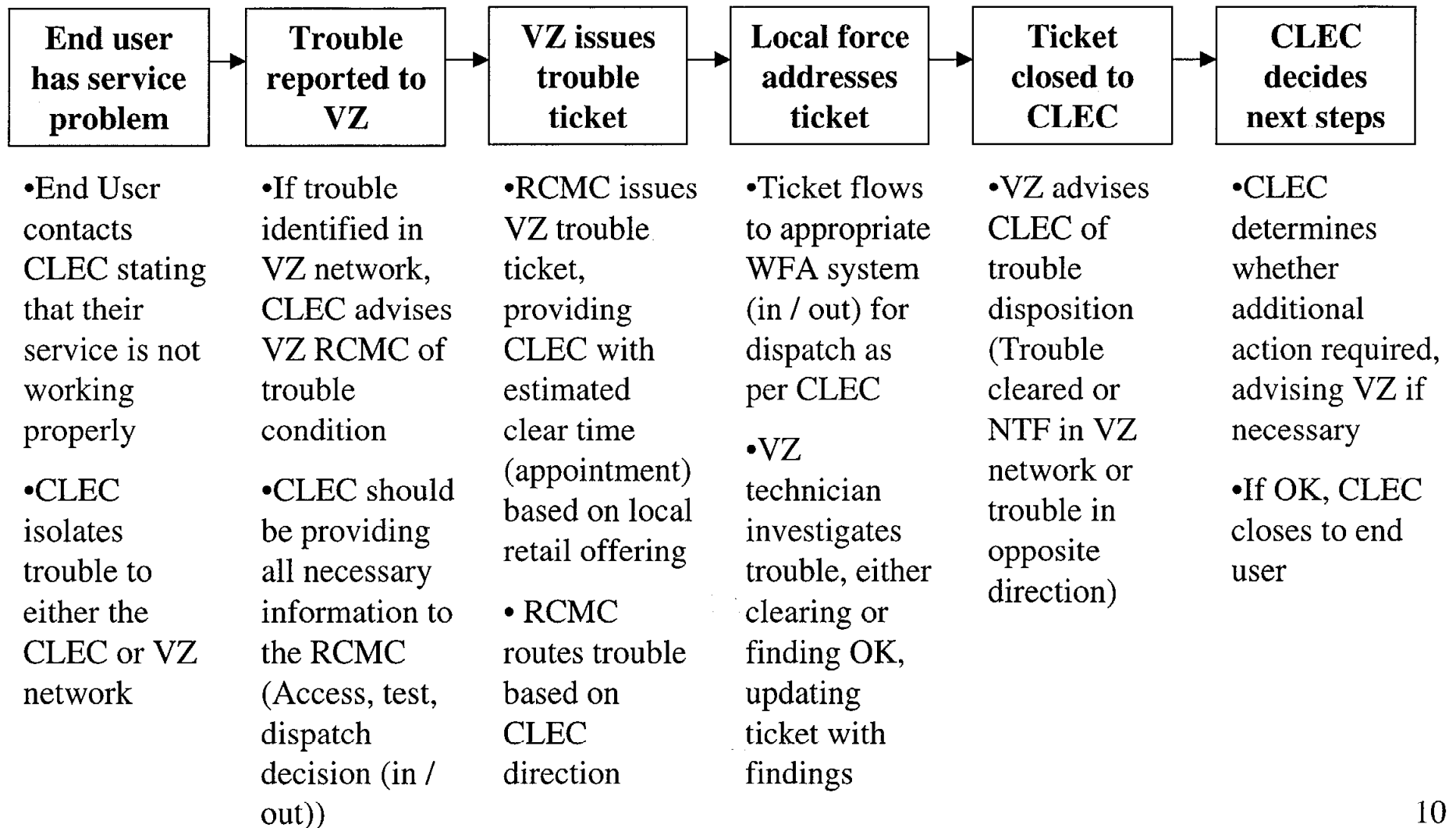
Simplified Hot Cut



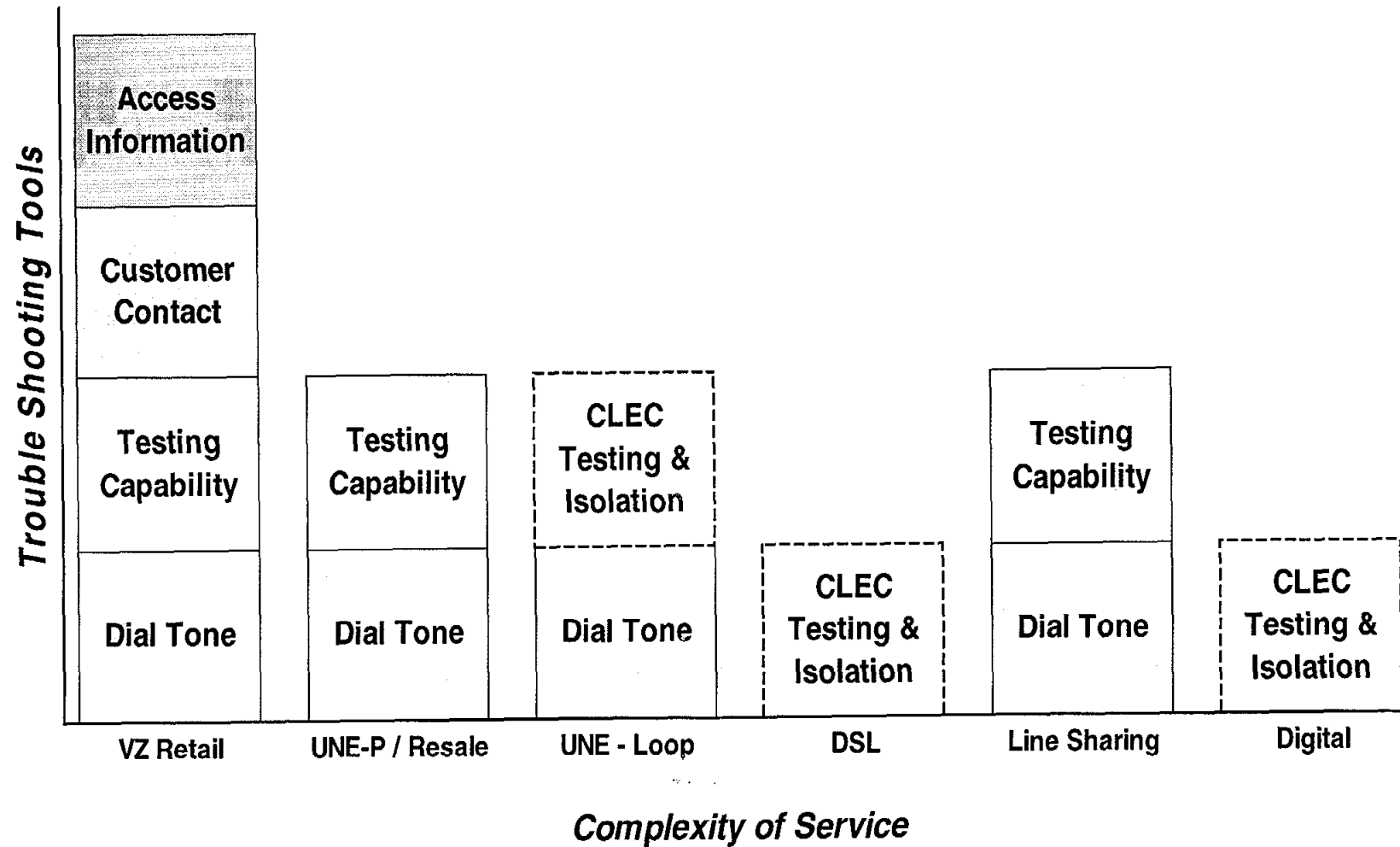
Hot Cut Process



Simple Loop Repair Process



Maintenance Variables



CLEC Maintenance Issues

- ♦ **Repeated Reports**

- Misdirected (dispatched in wrong direction)
- No access to customer's location
- Found OK in error

- ♦ **Mean Time to Repair**

- Rejecting offered weekend appointment skews MTTR
- Dispatched out, found trouble in CO on resale creates disparity in MTTR - CO



Operations Support Systems Overview

January 2002

Presented by:

Kathleen McLean

Senior Vice-President

OSS Planning & Performance Assurance

and Maryellen Langstine

Director, Customer Support



Agenda

- **Functionality & OSS Interfaces**
- **Development Approach,
Change Management and CLEC Support**
- **Production Experience**
- **Third Party Testing**



Functionality & OSS Interfaces



Wholesale Processes and Functions

Wholesale Processes	Pre-Ordering	Ordering	Provisioning	Billing	Maintenance & Repair
Wholesale Functions	<ul style="list-style-type: none">• Customer Service Record (CSR)• Address Validation• Telephone Number Reservation and Selection• Product and Service Availability• Due Date Availability• Loop Qualification for ISDN• Loop Qualification for xDSL• xDSL Loop Qual – Extended• Loop Make-up• Directory Listing• Installation Status Inquiry• Service Order Inquiry	<ul style="list-style-type: none">• Local Service Request (LSR) or Access Service Request (ASR)• Service Order• Local Service Request Confirmation - (LSRC)/Firm Order Confirmation - FOC)• Reject Notice with an error message if order could not enter SOP	<ul style="list-style-type: none">• Status Notices (Provisioning Completions - PCN, Billing Completions - BCN, Jeopardies)• Hotcut coordination• Switch translations for feature activation• Local facility and central office facility assignment• Installation requirements• E911 system updates• Call screening updates	<ul style="list-style-type: none">• Provide Wholesale bills via Connect:Direct, on paper, on tape, or on CD-ROM at the CLEC's choice• Provide bills in Bill Data Tape format• Provide daily usage in accordance with EMI format	<ul style="list-style-type: none">• Test POTs lines and Special Services• Create Trouble Ticket• Obtain Trouble Status• Modify Trouble Ticket• Cancel Trouble Ticket• Obtain Trouble Ticket History• Trouble Ticket Service Recovery



Verizon OSS Interfaces

Verizon offers two interfaces for pre-order and ordering/provisioning:

- Web GUI - a human to computer interface built using Web technologies and accessed through direct connection or through the Internet
- Electronic Data Interchange (EDI) - an application-to-application interface that enables a CLEC to electronically connect its OSS to Verizon's OSS

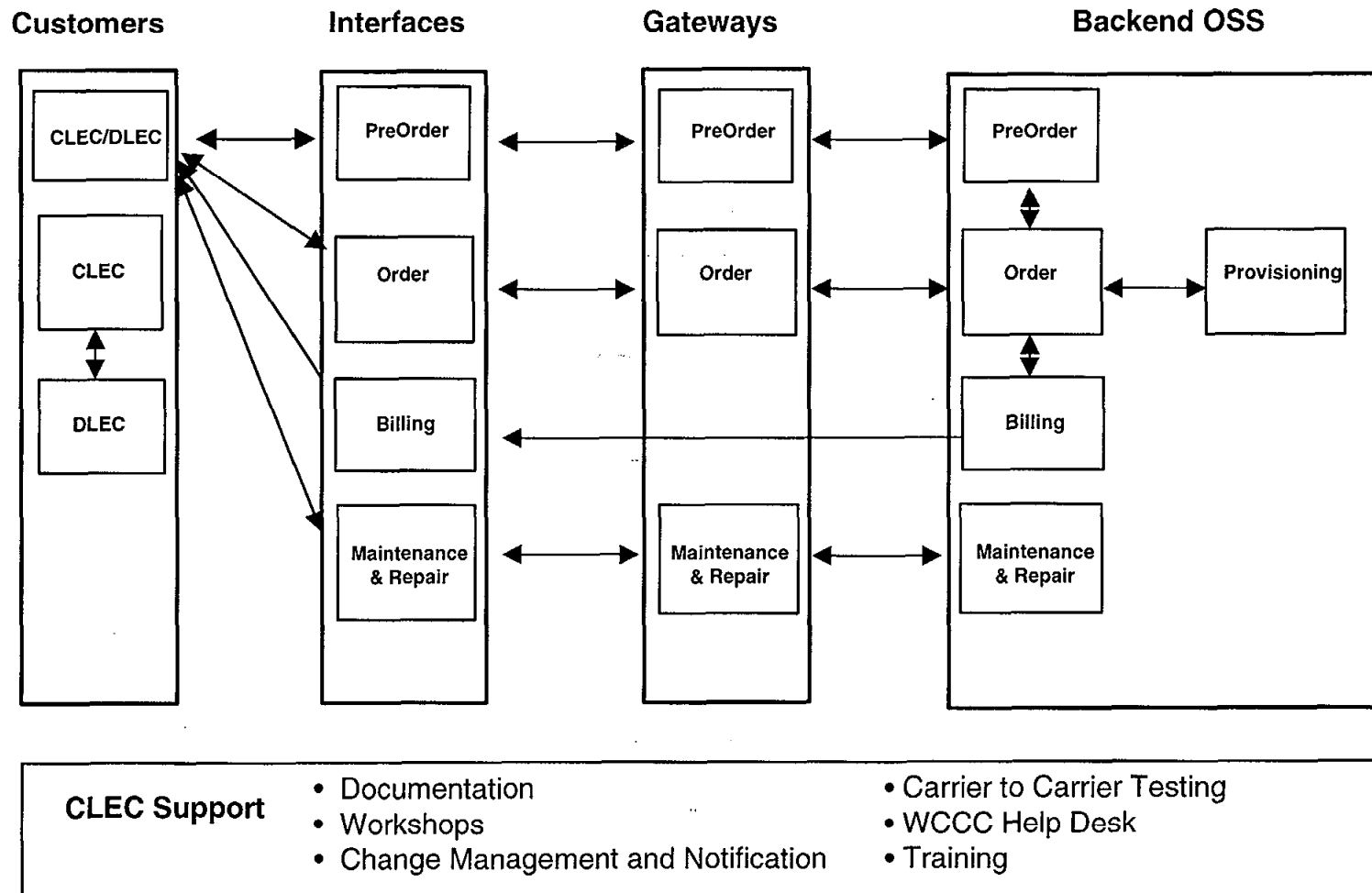
and a third for pre-ordering....

- Common Object Request Broker Architecture (CORBA) - an application-to-application interface that enables a CLEC to electronically connect its OSS to Verizon's OSS
- Verizon offers two interfaces for maintenance and repair:
 - Web GUI - a human to machine interface built using Web technologies and accessed through direct connection or through the Internet
 - Electronic Bonding Interface (EBI) - an application-to-application interface that enables a CLEC to electronically connect its OSS to Verizon's OSS
- Verizon supplies call usage data for billing purposes to CLECs via the Daily Usage File (DUF) available via electronic transfer or magnetic tape
- Verizon offers bills in two formats:
 - Verizon end user format - available on paper, CD-ROM, magnetic tape
 - Billing Output Specification, Bill Data Tape (BOS BDT) - available on magnetic tape or electronic transfer (Connect:Direct)

Verizon's OSS interfaces have been developed consistent with industry standards and guidelines as promulgated by the subcommittees of the Alliance for Telecommunications Industry Solutions (ATIS)



High Level Wholesale OSS System Flow



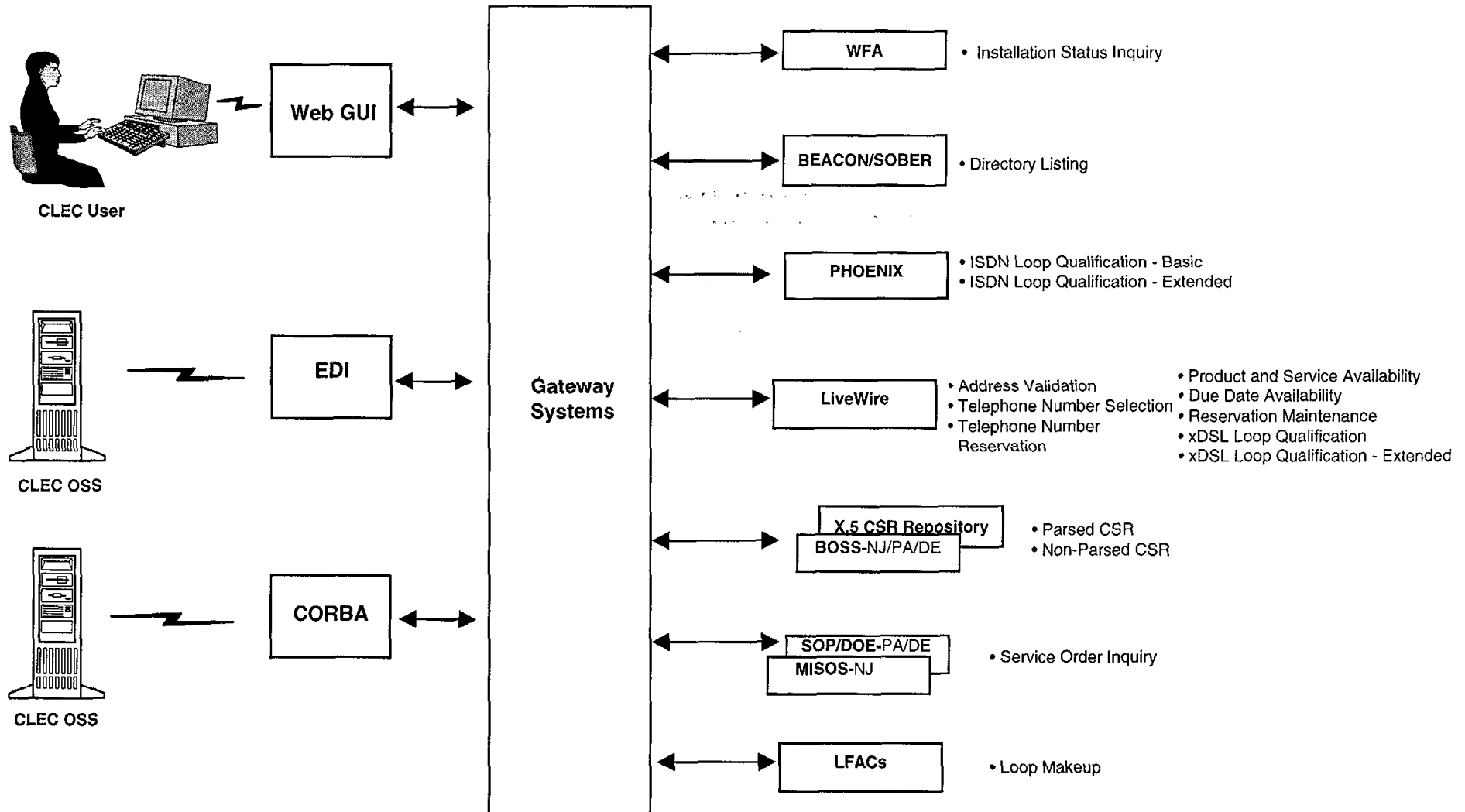


Pre-Ordering Process

- **Before placing an order, CLECs can:**
 - **Access end-user Customer Service Records (CSRs) in parsed and unparsed formats.**
CSRs include:
 - **Billing name and address**
 - **Billing and working telephone numbers for the account**
 - **List of all services provided to the end-user**
 - **The end-user's presubscribed interexchange carrier and local (or intraLATA) prescribed interexchange carrier ("PIC" and "LPIC")**
 - **Determine the availability of features and functions**
 - **Determine local and long distance carriers by NPA/NXX**
 - **Reserve and select telephone numbers and verify addresses**
 - **View the end-user's existing directory listing**
 - **Select due dates**
 - **Check whether a loop is qualified for ISDN or xDSL services**
 - **Request a "manual" loop qualification**
 - **Review loop make-up information**
- **After an order has been placed, CLECs can:**
 - **Check the installation status of the order**
 - **Obtain a copy of the service order as it exists in Verizon's Service Order Processor (SOP)**



Pre-Order Process Flow



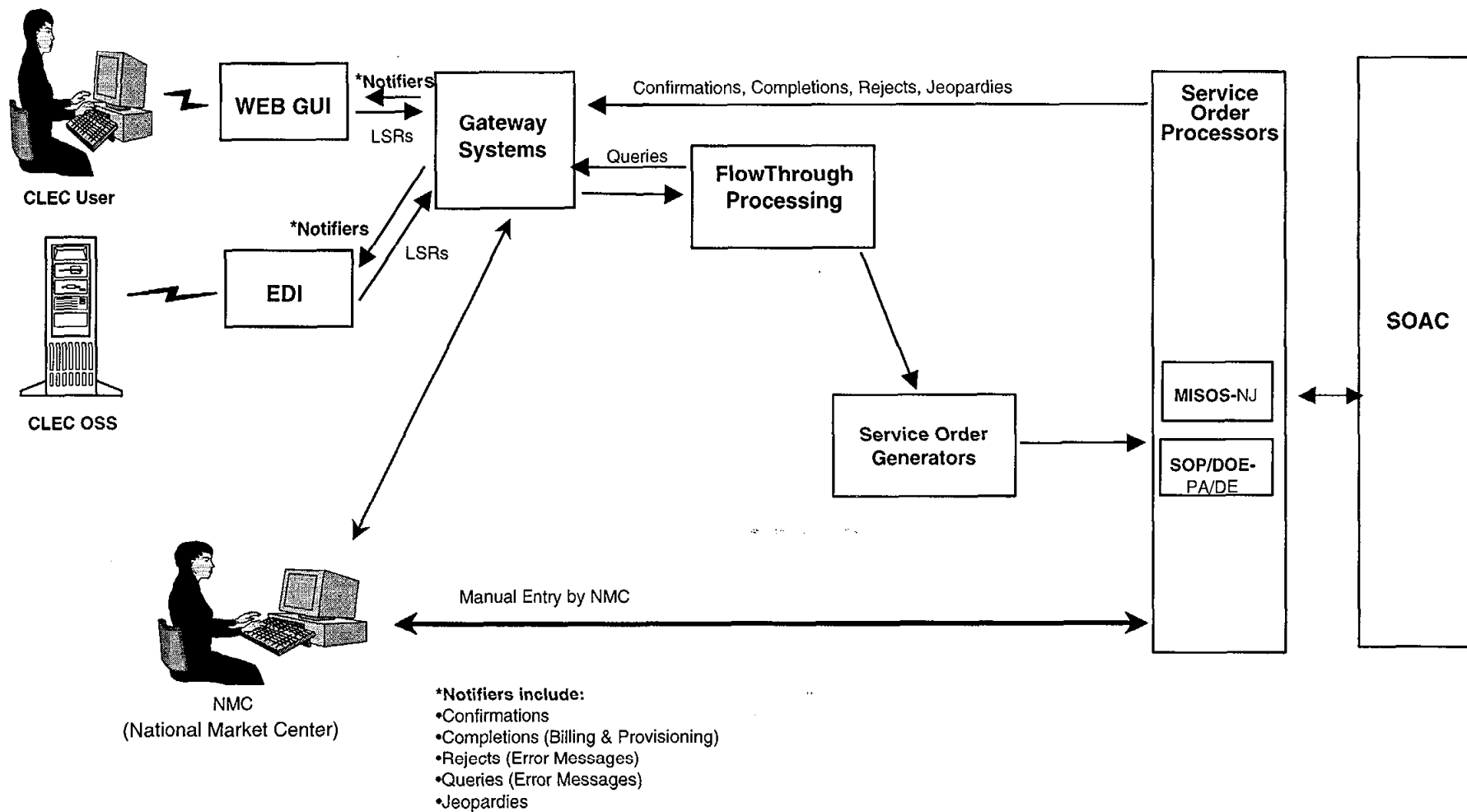


Ordering Process

- CLECs use Local Service Requests (LSRs) to order Resale, UNE-Platform, and UNEs.
- CLECs submit an LSR. Verizon sends acknowledgement of receipt to CLECs.
- Verizon validates the LSR.
 - If errors are detected, error messages are returned to the CLEC.
 - If the LSR passes validation, one or more Service Order(s) is/are created.
- CLECs receive a Local Service Request Confirmation (LSRC)/Firm Order Confirmation (FOC) to indicate that the order has entered the Service Order Processor (SOP)
- The ordering process includes the delivery of status notifiers as the order progresses through work steps:
 - Provisioning Completion Notifier (PCN)
 - Billing Completion Notifier (BCN)
 - Jeopardy Notifier (JEP)



Ordering Process Flow





Order Flow-through

- Effort to increase flow through is focused on largest order volume
- Resale comprises more than 70% of the total order volume in New Jersey, with more than 80% of those Resale orders flowing through
- New Jersey flows through more than 72% of all LSRs, greater than New York, Massachusetts, or Pennsylvania at the same point in the 271 process
- The same order types that flow through in New York, Massachusetts, and Pennsylvania are also designed to flow through in New Jersey whether or not they are currently being submitted by CLECs

	New York October 1999	Massachusetts February 2001	Pennsylvania July 2001	New Jersey November 2001
Resale %	42.82%	45.94%	55.03%	80.90%
Resale Volume	15265	11364	6680	22518
UNE %	60.32%	63.85%	72.04%	47.84%
UNE Volume	80588	34638	87218	7893
Combined %	57.53%	59.43%	70.80%	72.32%
Resale/UNE Volume	95853	46002	93898	30411

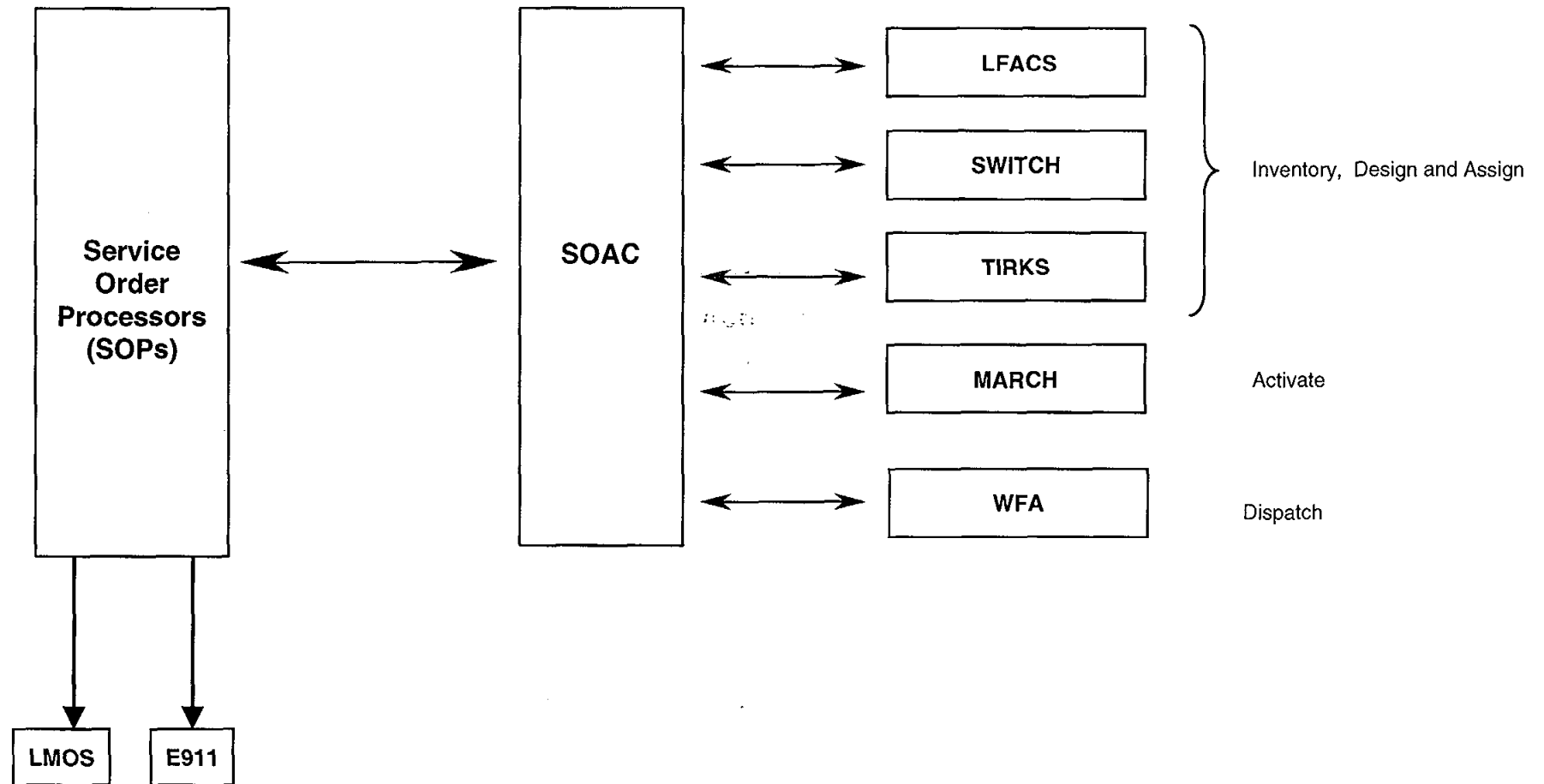


Provisioning Process

- **Provisioning is essentially internal to Verizon once an order is submitted**
- **Systems and processes for most CLEC orders are the the same as those used for Verizon's retail orders**
- **Provisioning includes:**
 - **Specific processes for loop orders for CLECs that have no retail analog**
 - **Switch translations for feature activation**
 - **Local facility and central office facility assignment**
 - **Installation requirements/dispatch**
 - **E911 system updates**
 - **Call screening updates**
 - **Maintenance system updates**
 - **Billing updates**



Provisioning Process Flow





Billing Process

- Billing systems are the same as those used for Verizon's retail and interexchange customers
- Billing includes:
 - Unbundled Network Element (UNE) charges
 - Usage billing information/Daily Usage File (DUF)
 - Recurring charges
 - Non-Recurring charges
 - Service activity related charges/credits
 - Wholesale bill
- CLECs can receive bills via:
 - Connect:Direct
 - Paper
 - Tape
 - CD-ROM



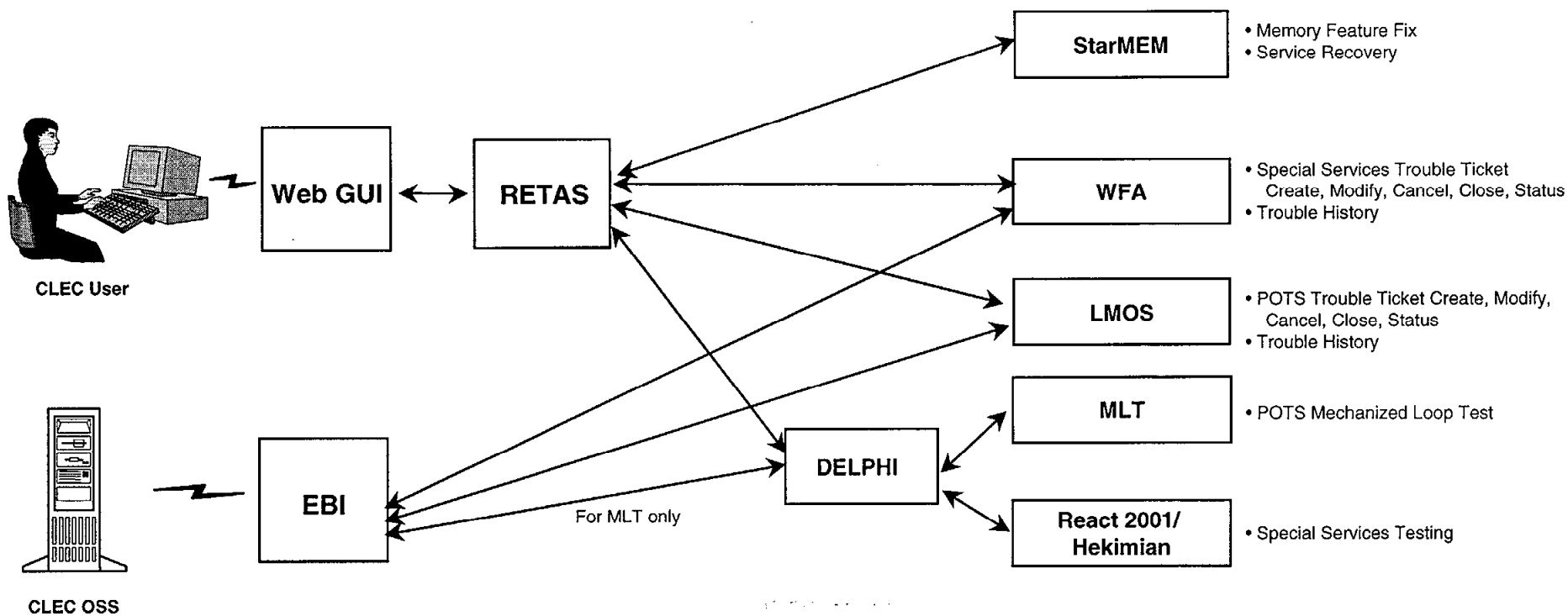


Maintenance & Repair Process

- CLECs can perform the following functions:
 - Test
 - POTS lines
 - Special Services (via Web GUI only)
 - Create Trouble Ticket
 - Obtain Trouble Status
 - Modify Trouble Ticket
 - Request Cancellation of Trouble Ticket
 - Request Trouble Ticket History
 - Trouble Ticket Service Recovery



Maintenance & Repair Process Flow

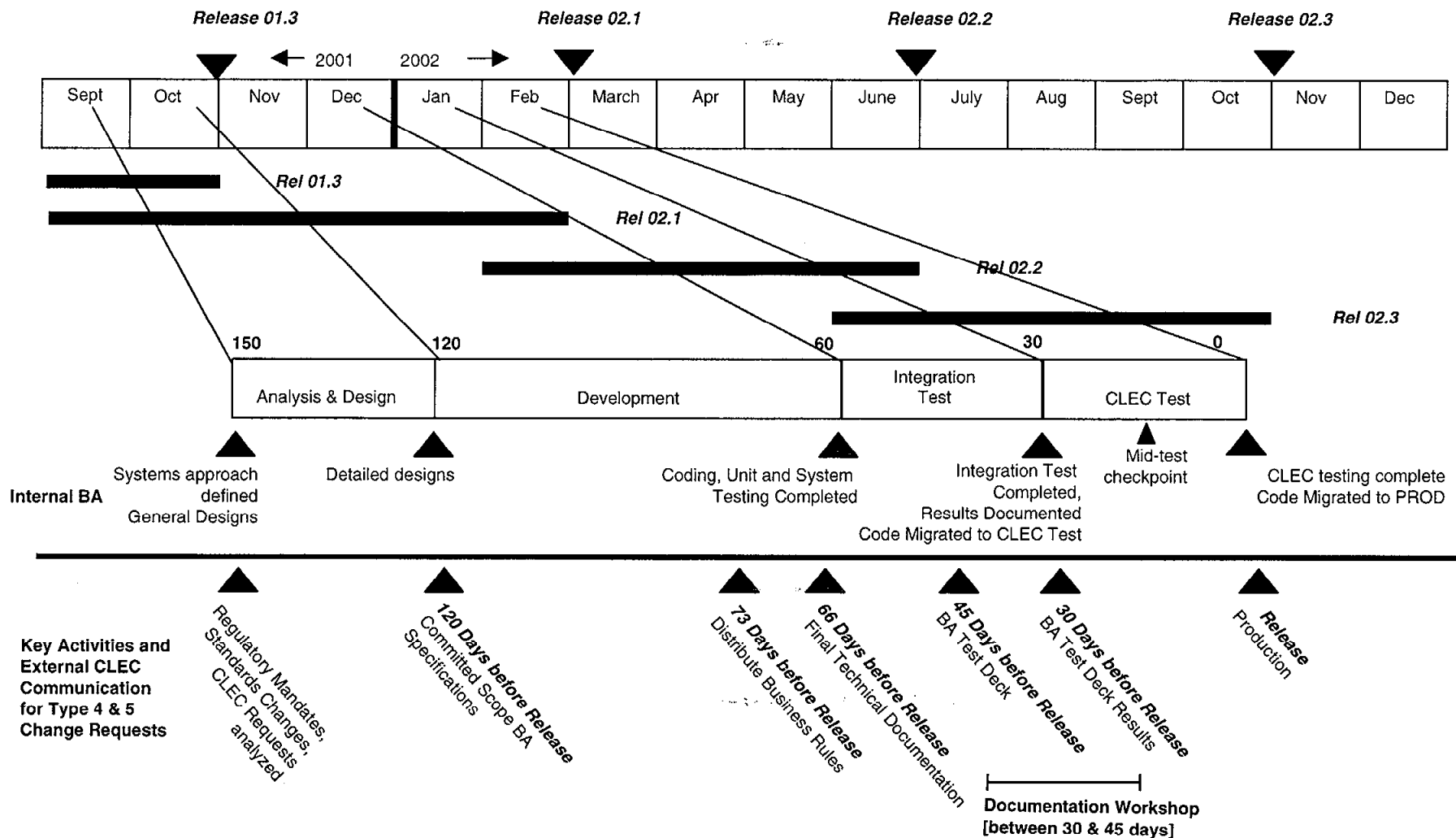




Development Approach, Change Management & CLEC Support



Development Timeline and 2002 Planned Release Schedule





Change Management & CLEC Support

Change Management	Assistance & Documentation	CLEC Test Environment (CTE)	Wholesale Customer Care Center (Help Desk)
<ul style="list-style-type: none"> • Conducts monthly meetings with CLECs to discuss system-related matters • Manages distribution of System and Business Rule Change Notices • Works with CLECs to define requirements and prioritize systems changes • Sponsors workshops on topics such as help desk processes, CLEC-to-CLEC migrations and others • Receives requests from CLECs for system changes, and manages all types of Change Requests: <ul style="list-style-type: none"> Type 1-Emergency Maintenance Type 2-Regulatory Change Type 3-Industry Standard Change Type 4-Verizon-originated Change Type 5-CLEC-originated Change 	<p>Assistance</p> <ul style="list-style-type: none"> • Customer Information Response Team • Connectivity Support • Industry Issues Management, special projects and topics • OSS Support, assistance to small and intermediate CLECs • Customer Education, classroom and online training and documentation <p>Documentation</p> <ul style="list-style-type: none"> • Pre-Order & Order Business Rules • Pre-Order & Order EDI Specifications • Combined Pre-Order & Order Documentation • (Business rules and EDI specs) • Pre-Order CORBA Specifications • Combined Pre-Order Documentation (Business Rules and CORBA Specs) • Specifications for Access Service Request • Web GUI User Guide • Order Error Messages • Trouble Administration Business Rules • E911 PS/ALI Guide • Test Deck • CLEC Handbook 	<ul style="list-style-type: none"> • Provides CLECs with stable environment for application to application pre-ordering and ordering new entrant and new release testing • Contains same applications as production, up to and including SOP • Contains CLEC and Verizon test data • Matches production environment except during CLEC test periods for new releases, when it matches what will be in production following the release • Parallels production environment in resolution of problems and issues • Supported by Verizon Test Coordinators, Customer Support Team, and Wholesale Customer Care Center (WCCC) • CLECs submit test plan six weeks prior to release implementation 	<ul style="list-style-type: none"> • Provides a single point of contact for all CLEC reports of systems issues, to provide timely notification to the CLECs of such events, and to ensure that any problems are resolved as quickly as possible • Serves CLECs operating throughout the former 14 state Bell Atlantic region • Answers incoming calls from CLECs regarding the Verizon Web GUI or the Verizon OSS interfaces to CLEC provided applications • Located in Newark, NJ

Regularly Scheduled Meetings



Wholesale Customer Support

- **Organization of over 200 people to ensure CLECs have access to Verizon OSS and can use them effectively**
 - **Change Management**
 - **Connectivity**
 - **CLEC Testing**
 - **Documentation**
 - **Training**
 - **Wholesale Customer Care Center**
- **CLEC Change Management**
 - **More than 700 CLECs users participate in the OSS Change Management Process**
 - **60-75 CLEC users participate in the monthly Change Management Meetings**
- **CLEC Testing**
 - **On the average 14 CLECs participated in new release testing in February, June and October 2001**



Wholesale Customer Support

- **CLEC Documentation**
 - Three volume Handbook series for resellers and for purchasers of unbundled network elements.
 - Technical documentation to enable CLECs to program their systems to communicate with Verizon systems is updated with each release.
 - Business Rules
 - EDI, CORBA specs
 - Web GUI User Guide
 - Error Messages
 - LSOG 4 and LSOG 5 Pre-order and Order Business Rules have close to 12,000 attributes in each
- **CLEC Training**
 - Over 400 CLEC students trained in 45 instructor led-classes during 2001
 - Over 1100 CLECs users participated in the Verizon workshops and forums in 2001
- **CLEC Help Desks**
 - Wholesale Customer Care Center (WCCC) receives over 3000 calls from CLECs a month
 - Half result in an opening of a trouble ticket.
 - Over 50% trouble tickets closed in less that one day.
 - Customer Inquiry Response Team (CIRT) receives over 3100 calls per month from CLECs



Production Experience



Production Information

- Verizon provides CLECs with the same OSS interfaces and functionality in New Jersey as it does in New York, Massachusetts, Pennsylvania and throughout the former Bell Atlantic states.
- There is one set of Verizon pre-ordering and ordering interfaces and gateway systems throughout the former Bell Atlantic states. The backend OSS in New Jersey are different than New York and Massachusetts. The backend OSS in New Jersey are the same as Pennsylvania, with the exception of the Service Order Processor.
- In the former Bell Atlantic states, Verizon process approximately 900,000 LSRs each month and over 2.6 million pre-order transactions.

October 2001		
State	Order	Pre-Order
Delaware	4,985	14,486
Maryland	57,322	184,173
New Jersey	44,005	147,574
Pennsylvania	163,454	560,085
Virginia	68,086	208,884
Washington DC	12,413	45,129
West Virginia	7,010	22,808
South Total	357,275	1,183,139
North Total	555,591	1,490,639
VERIZON-EAST	912,866	2,673,778



Third Party Testing

- KPMG test of Verizon OSS in New Jersey**



KPMG Third Party Test Results in New Jersey

- The New Jersey Board of Public Utilities (NJ BPU) retained KPMG Consulting to conduct an independent and comprehensive third-party test as was done in New York, Massachusetts and Pennsylvania. This test evaluated Verizon's OSS, interfaces, processes and documentation that support CLEC market entry.
- All Stages of the CLEC-ILEC relationship were considered, including:
 - Establishing the Relationship
 - Performing Daily Operations
 - Maintaining the Relationship
- The test scope was based on NJ BPU, CLEC and Verizon input. The Service Delivery Methods included:
 - Resale
 - Unbundled Network Elements (UNE)
 - Unbundled Network Elements-Platform (UNE-P)
- Tests were organized into five functional areas:
 - Relationship Management and Infrastructure
 - Pre-Order, Order and Provisioning
 - Billing
 - Maintenance and Repair
 - Performance Metrics Reporting

KPMG examined 536 test points and concluded that Verizon had satisfied 100% of them.

Line Splitting & Line Sharing



Evolution of DSL

1999

Bell Atlantic	Infospeed	ADSL	Data over Voice	Copper < 12 kft (now 18 kft)
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Clecs

Data Lecs	Variety of DSL	SDSL	Symmetric Data Only	Standalone Copper < 18 kft
		SDSL	Data & CLEC Voice	
		ADSL	Asymmetric Data	
		ADSL	Data over CLEC Voice	Line Splitting - Standalone
		IDSL	Data	Over ISDN loop
		HDSL	Data	Over HDSL loop

2000

June	Line Sharing	ADSL	CLEC Data over VZ Voice	Copper < 18 kft
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2001

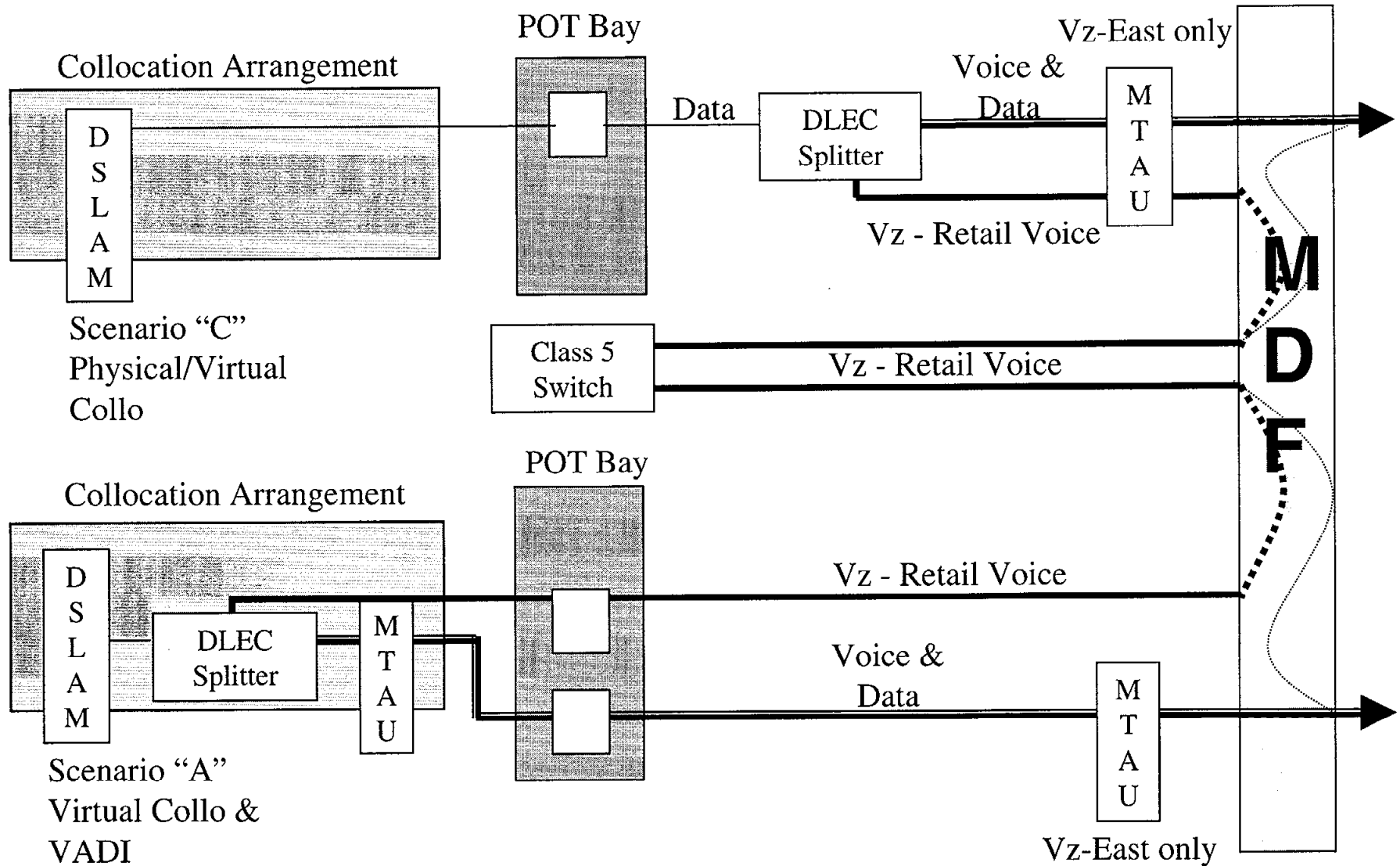
May	Subloop	ALL	ALL	Over copper distribution Dark fiber for feeder DS3 DS1 for feeder
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October	Enhanced Line Splitting		CLEC Data over CLEC Voice	Conversion from UNE-P Add data to UNE-P Conversion from Line Sharing
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October	Resold VZ DSL		Resold DSL over Resold Voice	
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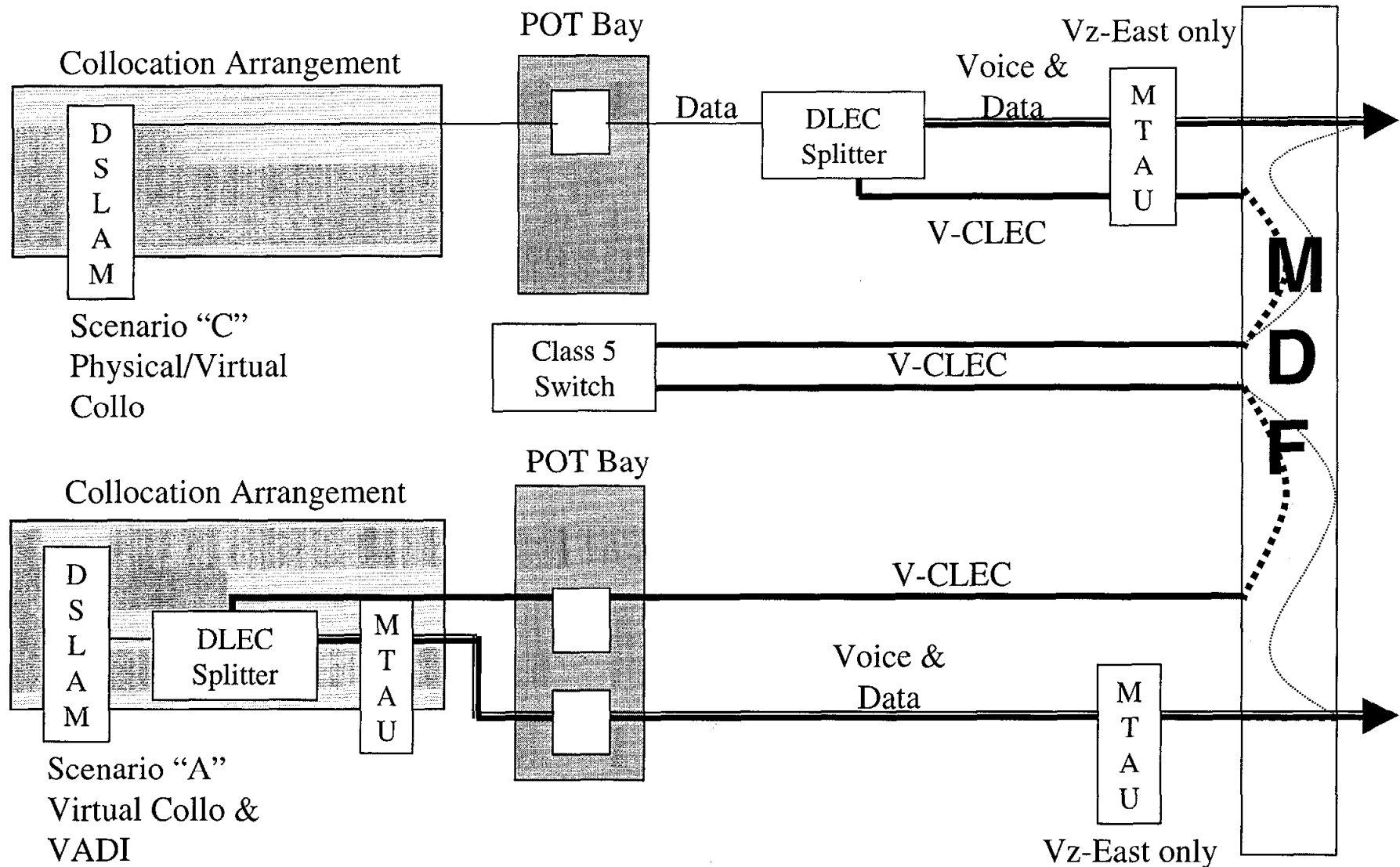
DSL Line Sharing

Current Configuration



DSL Line Splitting

Current Configuration



Line Splitting-Enhanced *Ordering*

- ♦ **Who Can Order**
 - Business relationships need to be established between DLEC and VLEC
- ♦ **DLEC (using VLEC AECN but on a different service) orders**
 - for addition of data to an UNE-P
 - VZ returns loop and port - customer service record information
 - VLEC owns the customer service record with TN and circuit ID
- ♦ **DLEC (using the VLEC AECN) provides:**
 - CFA
 - type of collocation arrangement (A or C)
 - type of splitter technology (splitter signature Y/N)
 - Wideband Testing - Y/N
- ♦ **NMC returns LSRC to VLEC (DLEC)**
 - Our customer is the VLEC
 - DLEC provides new circuit ID and billing information to VLEC
- ♦ **VLEC is the owner/landlord and DLEC is the tenant.**

Line Splitting-Enhanced

Testing and Maintenance

- ♦ **Testing Capabilities and Requirements varies by DLEC**
- ♦ **Differences depend on DLECs capabilities, equipment features and billing options chosen**
 - Different testing for Option A, C and standalone
 - Wideband Testing - varies by Area & CLEC
 - MLT - Splitter signature when available from DLEC
 - SYNC testing trial
- ♦ **Repair call may be initiated by DLEC and/or VLEC**
 - TN and circuit ID must be provided in both cases
- ♦ **Procedures to test both voice and data are required**
 - Even if trouble is reported on only one service
- ♦ **Closeout of trouble is reported to originator - not both**

Line Splitting-Enhanced *Timeline*

- ♦ **Nov 2000 - Jan 2001**
 - Developed line splitting service descriptions
- ♦ **January 2001 - May 2001**
 - Develop business rules
 - Develop M&Ps and training materials for all work groups (TISOC, CLPC, MLAC, CO Operations, RCMC)
 - Pilot criteria & participants
- ♦ **May 2001**
 - CLEC/DLEC software ready for testing ordering process
 - Training all Verizon employees affected by the pilot
- ♦ **June 2001 - September 2001 Pilot (NY)**
 - M&P modifications and software modifications as required
 - Objective # of orders - Minimum 300/ Maximum 11,535 - Actual = 69
- ♦ **October 2001**
 - Commercial deployment of Line splitting
- ♦ **October 2001 - December 2001**
 - Actual # of orders = 80 cumulative (Predominately in NY)

DLC-fed X-Box with R.T. Line Sharing (Subloop)

